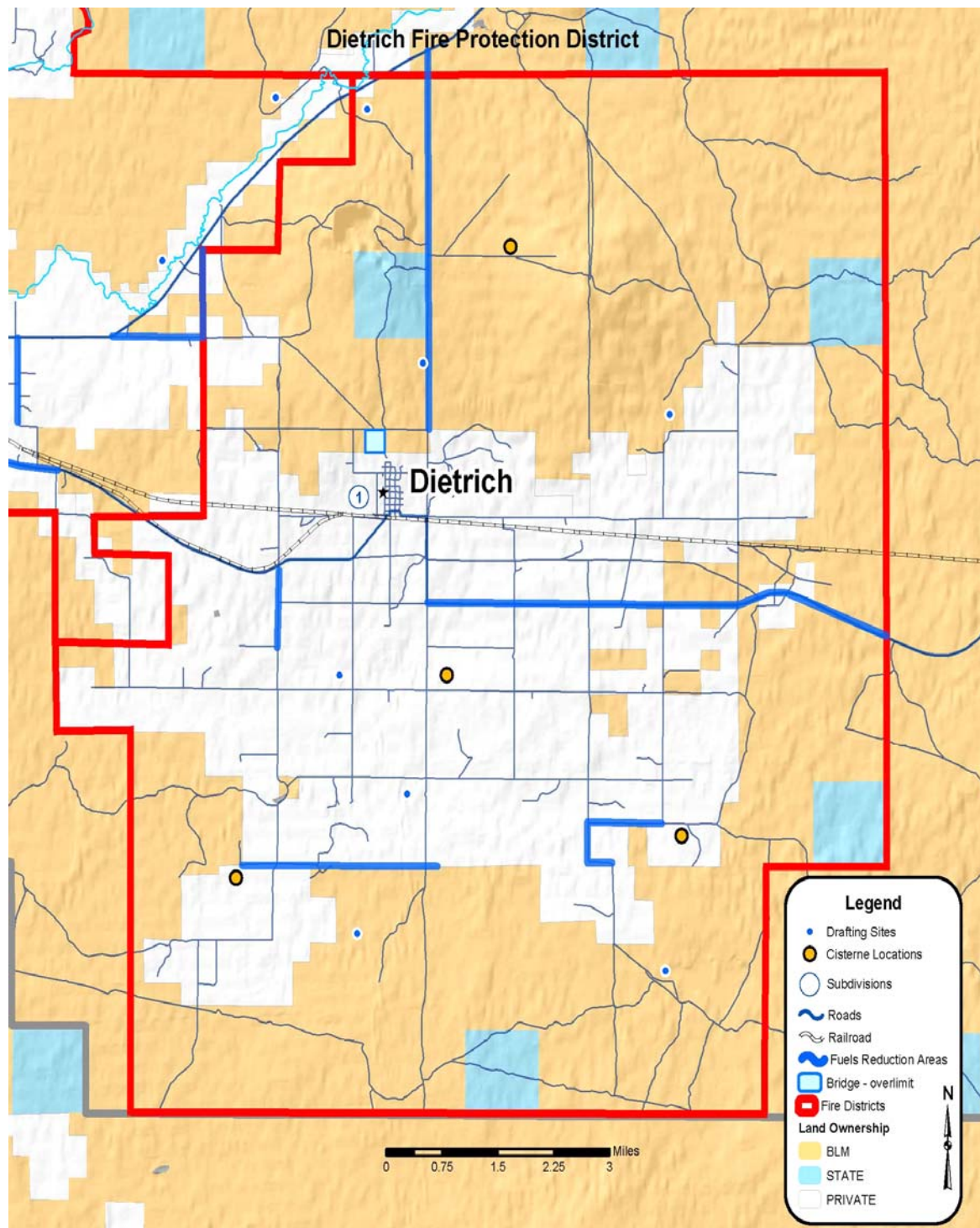


Figure 6. Dietrich Fire Protection District



6.1 Fire Protection District Infrastructure Needs

The Dietrich FPD (Figure 6) includes over 100 square miles of service area, which is moderately populated with private homes and ranches spread throughout the protection district. Most private lands are used for both grazing and crop production, while the Federal lands are used as summer grazing.

Open bodies of water or refill points include the, Richfield Canal, Dietrich Canal, Star Lake, and numerous smaller canals and laterals. (Figure 1)

The District responds to an average of nine (9) brush fires within the protection district annually (R&S Enterprise 2002), and since 1975 has been involved with eighty-nine (89) interagency wildfires for a total of 177,065 acres burned.

Table 9. Dietrich Fire Protection District Fire History Cause Determination

Year	Human	Natural	Structure	Vegetation	Vehicle	Other	Average Increase
2000	4	2	1	3	1	1	-0-
2001	5	1	2	3	-0-	1	-0-
2002	6	2	3	3	-0-	2	.75%
2003	6	3	2	4	1	2	.88%
Total	21	8	8	13	2	6	.81%

H=Human/Man Caused

N=Natural/Lightning Caused

Other= power lines, standby, fuel spills, false alarms, investigations, hazmat etc.

6.1a Field assessment forms and Ratings

The following Field Assessment Forms were used to assess each FPD and subdivision within Lincoln County. Assessment Tables ten (10), eleven (11) and, twelve (12) show the rating elements (Class A-C) for each area of concern. Tables 10 and 11 show areas of concern, the corresponding rating element, and the overall assessment value (1-3) assigned to each subdivision. Table 12 shows the overall results for all subdivisions. **The lower the value the lower the fire risk to that particular entity.**

Table 10. Fire Hazard Assessment Description Form

Rating Element	*Class A	** Class B	*** Class C
Vegetative Type	Annual grasses, forbs, some shrubs	Shrubs, annual cheat grass	Shrubs, Juniper mature trees
Slope	Flat to little slope < 10%	Moderate slopes (10-30%)	Steep Slopes (> 30%)
Aspect	North (N, NW, NE)	East or Level	South and West (SE,S,SW, W)
Elevation	>5500 feet	3500-5500 feet	<3500 feet
Fuel Type	Small, light fuels (grass, weeds, shrubs)	Medium Fuels, (brush, medium shrubs, small trees)	Heavy fuels, (timber, woodland, large brush or heavy planting of ornamentals)
Fuel Density	Non-continuous fuel bed. Grass and /or sparse fuels adjacent to federal land (<30% cover)	Broken Moderate fuels adjacent to federal land (31 to 60% cover)	Continuous fuel bed. Composition conducive to crown fires or high intensity surface fires (>60% cover)
Fuel Bed Depth	Low (average < 1 foot)	Moderate (average 1-3 feet)	High (average > 3 feet)

*Class A (1) = low fire risk

**Class B (2) = medium fire risk

***Class C (3) = high fire risk

Table 11. Structure Hazard Assessment Description Form

Rating Element	*Class A	**Class B	***Class C
Structure Density	At least one Structure per 0-5 acres	One structure per 5-10 acres	Less than one structure per 10 acres
Proximity of flammable fuels to Structures	> 100 feet	40-100 feet	Less than 40 feet
Predominant Building Materials/Flammability of Structures	Majority of homes have fire resistant roofs and /or siding	10-50% of homes have fire resistant roofs and/or siding	Less than 10% of homes have fire resistant roofs and/or siding
Survivable Space Actions on Private Property	Majority of homes have improved survivable space around property (>50%)	10-50% of homes have fire resistant roofs and/or siding	Less than 10% of homes have improved survivable space around property
Roads	Wide loop Roads that are maintained, paved or solid surface with shoulders	Roads maintained. Some narrow two lane roads with no shoulders	Narrow and or single lane, minimally maintained, no shoulders
Response Time	Prompt response time to interface areas (20min or less)	Moderate response time to interface areas (20-40 minutes)	Lengthy response to interface areas 40+ minutes
Access	Multiple entrances and exits that is well equipped for fire trucks with turnarounds	Limited access routes, 2 ways in and 2 ways out. Moderate grades	Narrow, dead end roads or 1 way in, 1 way out, Steep grades

***Class A (1) = low fire risk**

****Class B (2) = medium fire risk**

*****Class C (3) = high fire risk**

16 or less

16 - 21

22 - 27

Low Fire Risk

Moderate Fire Risk

High Fire Risk

Table 12: Community Assessment Description Form

Rating Element	*Class A	**Class B	***Class C
Community Description	There is a clear line where residential business, and public structures meet wildland fuels. Wildland fuels do not generally continue into the developed area.	There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area.	The community generally exists where homes, ranches, and other structures are scattered but adjacent to wildland vegetation.
Response Time	Prompt response time to interface areas (20 min or less).	Moderate response time to interface area (20-40 minutes).	Lengthy response time to interface area (40+ minutes).
Firefighting Capability	Adequate structural fire department. Sufficient personnel, equipment, and wildland firefighting capability and experience.	Inadequate fire department. Limited personnel, and or equipment but with some wildland firefighting experience and training.	Fire department non-existent or untrained and/or equipped to fight wildland fire.
Water Supply	Adequate supply of fire hydrants and pressure, and/or open water sources (pools, lakes, reservoirs, rivers, etc.).	Inadequate supply of fire hydrants, or limited pressure. Limited water supply. New Subdivisions	No pressure water system available near interface. No surface water available.
Local Emergency Operations Group (EOG)	Active EOG. Evacuation plan in place.	Limited participation in EOG. Have some form of evacuation process.	No EOG. No evacuation plan in place.
Structure Density	At least one structure per 0-5 acres.	One structure per 5-10 acres.	Less than one structure per 10 acres.
Community Planning Practices	County/local laws and zoning ordinances require use of fire safe residential design and adequate ingress/egress of fire suppression resources. Fire Department actively participates in planning process.	Local officials have an understanding of appropriate community planning practices for wildfire loss mitigation. Fire department has limited input to fire safe development and planning efforts.	Community standards for fire safe development and protection are marginal or non-existent. Little or no effort has been made in assessing and applying measures to reduce wildfire impact.
Fire Mitigation Ordinances, Laws, or Regulations in Place	Have adopted local ordinances or codes requiring fire safe landscaping, building and planning. Fire Department actively participates in planning process.	Have voluntary ordinances or codes requiring fire safe landscaping and building practices. Fire Department practices in planning process.	No local codes, laws or ordinances requiring fire safe building landscaping or planning processes.
Fire Department Equipment	Good supply of structure and wildland fire apparatus and miscellaneous specialty equipment.	Smaller supply of fire apparatus in fairly good repair with some specialty equipment.	Minimum amount of fire apparatus, which is old and in need of repair. None or little specialty equipment.

Rating Element	*Class A	**Class B	***Class C
Fire Department Training and Experience	Large, fully paid fire department with personnel that meet NFPA or NWCG training requirements, are experienced in wildland fire, and have adequate equipment.	Mixed fire department. Some paid and some volunteer personnel. Limited experience, training and equipment to fight wildland fire.	Small, all volunteer fire department. Limited training, experience and budget with regular turnover of personnel. Do not meet NFPA or NWCG standards.
Community Fire Safe Efforts and programs already in place	Organized and active groups (Fire Dept.) providing educational materials and programs for their community.	Limited interest and participation in educational programs. Fire Department does some prevention and public education.	No interest of participation in educational programs. No prevention/education efforts by fire department.
Community support and attitudes	Actively supports urban interface plans and actions.	Some participation in urban interface plans and actions.	Opposes urban interface plans and efforts.

*Class A (1) = low fire risk 16 or less **Low Fire Risk**
 Class B (2) = medium fire risk 16 - 21 **Moderate Fire Risk
 ***Class C (3) = high fire risk 22 - 27 **High Fire Risk**

6.1b Fire, Structural, and Community Assessment for Dietrich FPD

6.1c Fire Hazard Assessment

The following is a summary of the **Fire Hazard Assessment** for Dietrich FPD. Table 13 Shows the complete results. The one (1) legal subdivision in this FPD received a **Class A (low-1) fire hazard assessment rating for three (3) out of 6 elements (50%)** and a Class B (moderate) fire hazard assessment rating for two (2) out of six (6) elements for (33.3%).

The **overall fire hazard rating** for the Dietrich West Subdivision is **“low-1”**. The only element of concern is the buildup of light fuels on undeveloped lots within the subdivision.

Vegetation Type – Sagebrush-grassland will be the primary carrier of any ignition to the wildland-urban interface.

Slope – Most slopes within the assessment are 10-30%.

Aspect – The majority of the structures within the assessment area face east.

Elevation – The elevation within the assessment area averages between 4000-4200 feet.

Fuel Type – Fuel types within the assessment area are primarily sagebrush/grass.

Fuel Density – Fuel density within the assessment area is moderate with a <30% canopy cover.

Fuel Bed Depth – Fuel bed depth with the assessment area light – moderate, averaging 1-3 feet.

Table 13. Fire Hazard Assessment for Dietrich FPD

Subdivision/Parcels	Vegetative Type	Rating Elements					
		Slope	Aspect	Elevation	Fuel Type	Fuel Density	Fuel Bed Depth
Dietrich West	Sagebrush/grass	A	A	A	B	B	A

A(1)=Class A low fire hazard assessment rating

B(2)=Class B medium fire hazard assessment rating

C(3) =Class C high fire hazard assessment rating

6.1d Structural Hazard Assessment

The following is a summary of the **Structural Hazard Assessment** for Dietrich FPD. Table 14 displays the assessment results. The Dietrich West subdivisions received a **Class A (low-1) fire hazard assessment rating for five (5) out of seven (7) elements for (71.4%)**; and a Class B (medium) hazard assessment rating for two (2) out of seven (7) elements for (28.5%).

The **overall Structural Hazard rating** for the Dietrich West Subdivision is **“low-1”**. The only element of concern is the buildup of light fuels on undeveloped lots within the subdivision.

Structure Density – The structure density within the subdivision is at least one structure per acre.

Proximity to fuels – This subdivision within the assessment area and adjacent to the wildland-urban interface has less than fifty (50) feet to flammable fuels.

Building Materials – More than 90% of the structures within the assessment area have fire resistant roofs and/or siding.

Survivable Space – 65% of the structures within the assessment area and adjacent to the wildland-urban interface have improved survivable space around the property.

Roads – Roads within the assessment area are adequate to support emergency suppression equipment.

Response Time – Response time to the West Dietrich subdivision area is 5 minutes or less.

Access – Access to the subdivision is very satisfactory for emergency suppression equipment.

Table 14. Structural Hazard Assessment for Dietrich FPD

Subdivision/Parcel	Rating Elements						
	Structure Density	Proximity Of Fuels	Building Materials	Survivable Space	Roads	Response Time	Access
Dietrich West	A	B	A	B	A	A	A

A(1) =Class A low fire hazard assessment rating

B(2) =Class B medium fire hazard assessment rating

C(3)=Class C high fire hazard assessment rating

6.1e Community Assessment for Dietrich FPD.

Table 15 Community Assessment Summary for Dietrich

Rating Element	Class A	Class B	Class C	Rating (A,B, or C)
Community Description	There is a clear line where residential business, and public structures meet wildland fuels. Wildland fuels do not generally continue into the developed area.	There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area.	The community generally exists where homes, ranches, and other structures are scattered but adjacent to wildland vegetation.	B
Response Time	Prompt response time to interface areas (? Minutes or less)	Moderate response time to interface area (? Minutes)	Lengthy response time to interface area (? Minutes)	A
Firefighting Capability	Adequate structural fire department. Sufficient personnel, equipment, and wildland firefighting capability and experience.	Inadequate fire department. Limited personnel, and or equipment but with some wildland firefighting experience and training.	Fire department non-existent or untrained and/or equipped to fight wildland fire	B
Water Supply	Adequate supply of fire hydrants and pressure, and/or open water sources (pools, lakes, reservoirs, rivers, etc.).	Inadequate supply of fire hydrants, or limited pressure. Limited water supply.	No pressure water system available near interface. No surface water available.	A
Local Emergency Operations Group (EOG)	Active EOG. Evacuation plan in place.	Limited participation in EOG. Have some form of evacuation process.	No EOG. No evacuation plan in place.	B
Structure Density	At least one structure per 0-5 acres.	One structure per 5-10 acres.	Less than one structure per 10 acres.	A
Community Planning Practices	County/local laws and zoning ordinances require use of fire safe residential design and adequate ingress/egress of fire suppression resources. Fire department actively participates in planning process.	Local officials have an understanding of appropriate community planning practices for wildfire loss mitigation. Fire department has limited input to fire safe development and planning efforts.	Community standards for fire safe development and protection are marginal or non-existent. Little or no effort has been made in assessing and applying measures to reduce wildfire impact.	B
Fire Mitigation Ordinances, Laws, or Regulations in Place	Have adopted local ordinances or codes requiring fire safe landscaping, building and planning. Fire department actively participates in planning process.	Have voluntary ordinances or codes requiring fire safe landscaping and building practices. Fire department participates in planning process.	No local codes, laws or ordinances requiring fire safe building landscaping or planning processes.	C

Rating Element	Class A	Class B	Class C	Rating (A,B, or C)
Fire Department Equipment	Good supply of structure and wildland fire apparatus and miscellaneous specialty equipment.	Smaller supply of fire apparatus in fairly good repair with some specialty equipment.	Minimum amount of fire apparatus, which is old and in need of repair. None or little specialty equipment.	C
Fire Department Training and Experience	Large, fully paid fire department with personnel that meet NFPA or NWCG training requirements, are experienced in wildland fire, and have adequate equipment.	Mixed fire department. Some paid and some volunteer personnel. Limited experience, training and equipment to fight wildland fire.	Small, all volunteer fire department. Limited training, experience and budget with regular turnover of personnel. Do not meet NFPA or NWCG standards.	C
Community Fire Safe Efforts and programs already in place	Organized and active groups (Fire Dept.) providing educational materials and programs for their community.	Limited interest and participation in educational programs. Fire department does some prevention and public education.	No interest of participation in educational programs. No prevention/education efforts by fire department.	B
Community support and attitudes	Actively supports urban interface plans and actions.	Some participation in urban interface plans and actions.	Opposes urban interface plans and efforts.	A

A(1) =Class A - low fire hazard assessment rating

B(2) =Class B medium fire hazard assessment rating

C(3) =Class C high fire hazard assessment rating

The following is a summary of the Community Assessment for the Dietrich FPD. Table 15 displays the assessment results. Overall the Dietrich FPD received a Class A (low) community assessment rating for four (4) out of twelve (12) elements for (33.3%); **a Class B (medium) assessment rating for five (5) out of twelve (12) elements for (41.6%)**, and a Class C (high) assessment rating for three (3) out of twelve (12) elements for (25.0%).

The **overall Community Assessment rating** for the Dietrich FPD is “**medium or 2**” which reflects upon community support for firewise education and infrastructure needs throughout the FPD.

6.1f Dietrich Fire Department Infrastructure

Equipment: The department has a good variety of mechanized equipment to support structural and wildland fire incidents. However, the Structural Engines are outdated, in need of upgrading with new, state of the art equipment for less maintenance and more dependability. Upon equipment upgrade, the ten (10) year equipment rotation technique should be implemented to replace outdated emergency equipment

The department has the basic Personal Protective equipment (PPE) for necessary firefighter safety, however there is nothing available for new volunteers, personal protective items (nomex turnouts, and SCBA's) are expensive to maintain and difficult to replace when necessary.

Extraction tools are very expensive, but very important tools, when the needs arises. Extraction tools are considered "non-essential" equipment items; therefore normal funding is not available for purchase, maintenance or replacement. Every emergency service vehicle should have the basic set of extraction tools.

6.1g Personnel/Training

Presently Dietrich has a total of twelve (12) volunteers, of which, six (6) are active responders. (Table 5) The department needs more personnel to obtain the most efficient staffing levels on firefighting equipment. Also, a shortage exists for replacement firefighters to have available if an incident involves extended attack.

The proper management of an all-volunteer program requires a lot of skill and finesse. It is difficult for volunteers to take time off their regular full time jobs for needed fire training.

Volunteer firefighters require basic and advanced fire training annually, in an effort to meet training requirements of the National Wildfire Coordination Group (NWCG) and National Wildfire Firefighting Safety (NWFS) standards. Also additional wildland and structural training is necessary to maintain efficiency, maintain new volunteer upward mobility training ladders, and have an effective training cadre. The recommended standard ten (10) year training program, for each FPD is included in Recommendations: (narrative) basic – advanced training - matrix (Appendix B).

6.1h Facility

Presently, the Dietrich Fire Department is located in the old Dietrich Highway building. This facility was constructed in **1944** and is very inadequate. (Figure 7)

The facility has no restroom; no changing room; no office or training space, and very inadequate storage space. Two (2) of the four (4) department engines must be stored elsewhere or outside due to lack of space. J.R. Simplot donated the land for a new station in 2003. A new facility, with adequate space, including the QRU is the Dietrich Fire Department's top structural infrastructure priority.

6.1i Prevention/Education

The results of the structural assessment revealed the need for a promotional program to further the understanding of firewise practices around homes and agricultural structures. Public education and outreach are effective means of engaging the community in the process of reducing risks. And, an education and outreach program will motivate homeowners to take measures around their individual homes and property, thereby contributing to the reduction of wildfire hazards in each community.

Figure 7: Dietrich Fire Station 2004 (new in 1944)



Figure 8: Fuel Loading Dietrich FPD Highway 24/Union Pacific Railroad ROW

